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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/713,929	11/16/2000	Hideki Tai	JP919990195	4074
Anne Vachon I	7590 11/02/2007 Dougherty Esq		EXAM	INER
On Behalf Of I	BM Corporation		HOSSAIN,	TANIM M
3173 Cedar Ros Yorktown Heig			ART UNIT	PAPER NUMBER
_			2145	
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			MAIL DATE	DELIVERY MODE
			11/02/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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	Application No.	Applicant(s)	,
ORT - A-41 O	09/713,929	TAI, ET AL	
Office Action Summary	Examiner	Art Unit	
	Tanim Hossain	2145	
The MAILING DATE of this comm Period for Reply	unication appears on the cove	r sheet with the correspondence a	address
A SHORTENED STATUTORY PERIOD WHICHEVER IS LONGER, FROM THE  - Extensions of time may be available under the provision after SIX (6) MONTHS from the mailing date of this co - If NO period for reply is specified above, the maximum - Failure to reply within the set or extended period for re Any reply received by the Office later than three month earned patent term adjustment. See 37 CFR 1.704(b)	MAILING DATE OF THIS CO ons of 37 CFR 1.136(a). In no event, howommunication.  In statutory period will apply and will expire apply will, by statute, cause the application this after the mailing date of this communication.	DMMUNICATION.  ever, may a reply be timely filed  SIX (6) MONTHS from the mailing date of this o become ABANDONED (35 U.S.C. § 133).	` ,
Status			
1) Responsive to communication(s)	filed on 23 July 2007.		
2a) This action is <b>FINAL</b> .	2b)⊠ This action is non-fin	al.	
3) Since this application is in condition	on for allowance except for for	rmal matters, prosecution as to the	he merits is
closed in accordance with the pra		•	
Disposition of Claims		•	
4) Claim(s) <u>1,3-6,8 and 9</u> is/are pend	ding in the application.	•	
4a) Of the above claim(s) is	• ' '	ation.	
5) Claim(s) is/are allowed.			
6) Claim(s) <u>1,3-6,8 and 9</u> is/are reject	cted		
7) Claim(s) is/are objected to.			
8) Claim(s) are subject to rest	•	ment.	
Application Papers			
9) The specification is objected to by	the Evaminer	,	
10) The drawing(s) filed on is/a		icated to by the Eveniner	
Applicant may not request that any ot			
Replacement drawing sheet(s) including			
11) The oath or declaration is objected			
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a clai	m for foreign priority under 35	U.S.C. § 119(a)-(d) or (f).	
a) ☐ All b) ☐ Some * c) ☐ None of	* ' '		
	ity documents have been rece	eived.	
	=	eived in Application No	
•		ave been received in this Nationa	al Stage
<del>-</del> · · · · · · · · · · · · · · · · · · ·	itional Bureau (PCT Rule 17.2		<b>g</b> -
* See the attached detailed Office ac	` ·	` ''	
Attachment(s)			
Notice of References Cited (PTO-892)	4) 🗆	Interview Summary (PTO-413)	·
2) Notice of Draftsperson's Patent Drawing Review		Paper No(s)/Mail Date	
3) Information Disclosure Statement(s) (PTO/SB/0 Paper No(s)/Mail Date	5) <u> </u> 6)	Notice of Informal Patent Application Other:	•

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## **DETAILED ACTION**

In view of the Appeal Brief filed on January 10, 2007, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3-6, 8, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ho (U.S. 5,943,621).

As per claim 1, Ho teaches a mobile agent management apparatus comprising: an agent server (figure 3); and a registration server for maintaining location information of mobile agents (column 4, lines 1-42); wherein the agent server comprises: means for maintaining a history of movement of each of said mobile agents including a counter for accumulating a count of the net number of movements for each of said mobile agents (figure 3; column 4, line 56 – column 5, line 4; column 5, lines 20-35; figure 6; column 7, lines 3-10); and means for periodically generating updates for updating location information of each of said agents, said requests including at least a mobile agent identifier and said accumulated number of movements for said mobile agent, to renew location information at said registration server (column 7, lines 11-26; column 8, lines 4-35). Ho does not specifically teach that there exists a plurality of agent servers. It would have been obvious to one of ordinary skill in the art to include a plurality of agent servers, as this would be a design choice governed by need, for example. If the system were sufficiently large enough to require multiple agent servers, it would have been an obvious modification to include this teaching. Ho teaches the use of a net number of movements within the different cells, but does not specifically use a gross number of movements. It would have been obvious to one of ordinary skill in the art at the time of the invention to replace the net movement number with a gross movement number, because this was a well-known embodiment at the time of the invention (see column 2, lines 42-51). Changing the counting scheme would have been an obvious design choice, rather than a patentable distinction. Ho does not

specifically teach the generation of requests to update information. Ho teaches the transmittal and implementation of update information. To modify the invention such that updates take place through requests would have been obvious to one of ordinary skill in the art, as the concept of requesting updates is well known in the art, and would further constitute a design choice to achieve the goal of updating location information. Therefore, such a modification would have been obvious to one of ordinary skill in the art at the time of the invention.

As per claim 3, Ho further teaches that each of the agent servers further comprises comparator means for comparing the count in said counter with a predetermined threshold (figure 3; column 4, line 56 – column 5, line 4).

As per claim 4, Ho further teaches that the request generator of each of said agent servers generates a request to said registration server for updating location information when the count of the accumulated number of movements of a corresponding mobile agent exceeds a predetermined threshold (column 7, line 11-26; column 8, line 4-35).

As per claim 5, Ho further teaches that said registration server comprises at least one register for maintaining accumulated number of movements and locations of each of said mobile agents in an associated manner and renews said location information of each of said mobile agents only upon receipt of requests for updating location information associated with a higher accumulated number of movements (column 7, line 11-26; column 8, line 4-35).

As per claim 6, Ho further teaches a method for managing locations of mobile agents by using a plurality of agent servers and a registration server for maintaining locations of mobile agents comprising the steps of: an each of said agent servers (figure 3); maintaining history of movement of each of said mobile agents including accumulating a count of the number of

movements for each of said mobile agents (figure 3; column 4, line 56 – column 5, line 4; column 5, lines 20-35; figure 6; column 7, lines 3-10); periodically generating requests for updating and deleting registries, said requests including at least a mobile agent identifier and said count of the accumulated number of movements for said mobile agent (figure 3; column 4, line 56 – column 5, line 4; column 5, lines 20-35; figure 6; column 7, lines 3-10); and at said registration server, renewing location information of each of said mobile agents kept by said registration server with said requests (column 7, lines 11-26; column 8, lines 4-35).

As per claim 8, Ho further teaches comparing said count of the accumulated number of movements to a threshold number of movements (Ho: column 5, line 53 – column 6, line 49).

As per claim 9, Ho further teaches that said generating is done when said count of the accumulated number of movements exceeds said threshold number of movements (Ho: column 5, line 53 – column 6, line 49).

## Response to Arguments

Applicant's arguments filed on July 23, 2007 have fully been considered and are respectfully traversed by the new grounds of rejection.

a. Regarding the discussion of Ho teaching an adaptive movement counter, a new grounds of rejection has been issued such that an absolute movement counter is contemplated on the basis of Ho's own disclosure and the basis of obviousness.

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## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tanim Hossain whose telephone number is 571/272-3881. The examiner can normally be reached on 8:30 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on 571/272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tanim Hossain
Patent Examiner
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JASON CARDONE SUPERVISORY PATENT EXAMINER

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